REMARKS

Claims 1-12 are all the claims pending in the application.

I. Claim Rejections under 35 U.S.C. § 102

Claims 1-3 and 6 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Ellis et al. (U.S. 6,029,226). Applicant kindly requests that the Examiner reconsider this rejection in view of the comments below.

Claim 1 recites the features of a writing unit operable, if a write end address of one of the received commands is consecutive with a write start address of a following command, to perform the data writing to the memory card by the consecutive commands in a single process, wherein the process is activated when an analysis unit decodes a write-start address *A* and a sector number *s* from the one command, and involves the data writing being started from the write-start address *A*, and wherein the analysis unit analyzes the following command until the written sector number reaches *s*. Applicant respectfully submits that Ellis does not disclose or suggest such a combination of features.

With respect to Ellis, Applicant notes that this reference discloses a method for writing data to a storage device in which two write commands can be processed as a single command (see col. 3, lines 21-24 and col. 6, lines 25-26). In Ellis, a merger of two such write commands to a single write command is referred to as a "coalesced" write (see col. 6, lines 22-25). Regarding the "coalesced" write of Ellis, Applicant notes that in the Office Action, the Examiner has taken the position that the commands in the "coalesced" write correspond to the claimed "one command" and "following command" (see Office Action at page 3).

In Ellis, in performing the "coalesced" write, it is explained that upon receiving a first write request to write a first set of data to a storage device, the first set of data is transferred to memory for temporary storage prior to transfer to the storage device (see col. 3, lines 25-27). Thereafter, upon receiving a second write request to write a second set of data to the storage device, a comparison is made between the ending logical block address (LBA) of the first set of data that is stored in the memory and the logical block address of the second set of data (see col. 3, lines 31-33; and col. 6, lines 17-22). If the logical block address of the second write request is within a certain range of the ending logical block address of the first set of data that is stored in the memory, then the second set of data is written to the memory as part of the first write request (see col. 3, lines 37-41; col. 6, lines 17-22 and col. 7, lines 24-27).

Based on the foregoing description, Applicant notes that, in Ellis, the "one command" and the "following command" that are to be written to the storage device in a "coalesced" write are both temporarily stored in memory, and then are written to the storage device in a **single write operation.**

As noted above, claim 1 recites that the process is activated when an analysis unit decodes a write-start address *A* and **a sector number *s*** from the **one command**, and involves the data writing being started from the write-start address *A*, wherein the analysis unit analyzes the **following command** until the **written sector number** reaches *s*.

Regarding the above-noted features in claim 1, Applicant points out to the Examiner that the sector number *s* is explicitly identified as being a sector number of the "one command" (i.e., "a sector number *s* from the one command"), and that the analysis unit analyzes the **following command** until the **written sector number** reaches *s*. As such, it is clear that according to claim

1, the "following command" is analyzed while the "one command" is being written (i.e., "until the written sector number reaches *s*").

Taking the foregoing comments into account, Applicant notes that, in Ellis, because the "one command" and the "following command" are written in a **single write operation** (i.e., the "coalesced" write), and because claim 1 explicitly indicates that the "sector number *s*" is a sector of the "one command", that it simply would not be possible in Ellis to perform an analysis of the "following command until the written sector number reaches *s*".

With respect to the Examiner's comments in the Office Action indicating that the "following command" could be any command after the single process of the coalesced write in Ellis (see Office Action at the sentence bridging pages 11 and 12), Applicant notes that such a position is contradictory to the above-noted position that has been taken by the Examiner, in which the Examiner has identified the two commands in the "coalesced" write of Ellis as corresponding to the claimed "one command" and "following command". In particular, regarding the claimed feature of "a writing unit operable, if a write end address of one of the received commands is consecutive with a write start address of a following command, to perform the data writing to the memory card by the consecutive commands in a single process", Applicant notes that the Examiner has taken the position in the Office Action that the two commands in the "coalesced" write of Ellis correspond to the "one command" and the "following command" (see Office Action at page 3).

Moreover, regarding the above-noted feature of the analysis unit analyzing "the following command until the written sector number reaches s", Applicant notes that on page 4 of the Office Action, the Examiner has pointed to col. 7, lines 11-45 of Ellis as allegedly disclosing such a

feature. Applicants respectfully disagree for at least the following two reasons.

First, with respect to col. 7, lines 11-39 of Ellis, Applicant notes that this disclosure relates to the above-described process in Ellis in which the "one command" and the "following command" are written in a single write operation by a "coalesced" write. For the reasons described above, Applicant notes that such a "coalesced" write simply cannot involve an analysis of "the following command until the written sector number reaches s".

Second, with respect to col. 7, lines 39-45 of Ellis, Applicant notes that this disclosure relates to a "normal" write, not a "coalesced" write (see col. 6, lines 4-33 of Ellis for a description of the differences between a "normal" write and a "coalesced" write). As described above, the Examiner has clearly taken the position that the claimed "one command" and "following command" are being interpreted as the commands of the "coalesced" write. As such, Applicant notes that any reliance by the Examiner on the "normal" write for the teaching of an analysis of "the following command until the written sector number reaches s" is inconsistent with other positions taken by the Examiner in the Office Action.

In view of the foregoing, Applicant respectfully submits that Ellis does not disclose, suggest or otherwise render obvious the above-noted features recited in claim 1 of a writing unit operable, if a write end address of one of the received commands is consecutive with a write start address of a following command, to perform the data writing to the memory card by the consecutive commands in a single process, wherein the process is activated when an analysis unit decodes a write-start address *A* and a sector number *s* from the one command, and involves the data writing being started from the write-start address *A*, and wherein the analysis unit analyzes the following command until the written sector number reaches *s*.

Accordingly, Applicant submits that claim 1 is patentable over Ellis, an indication of which is kindly requested. Regarding claims 2, 3 and 6, Applicant notes that these claims depend from claim 1 and are therefore considered patentable at least by virtue of their dependency.

II. Claim Rejections under 35 U.S.C. § 103(a)

A. Claims 4 and 5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (U.S. 6,029,226) in view of Ellis et al. (U.S. 7,181,548).

Claims 4 and 5 depend from claim 1. Applicant submits that Ellis ('548) fails to cure the deficiencies of Ellis ('226), as discussed above, with respect to claim 1. Accordingly, Applicant submits that claims 4 and 5 are patentable at least by virtue of their dependency.

B. Claims 7 and 8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (U.S. 6,029,226) in view of Krantz (U.S. 6,826,650).

Claims 7 and 8 depend from claim 1. Applicant submits that Krantz fails to cure the deficiencies of Ellis, as discussed above, with respect to claim 1. Accordingly, Applicant submits that claims 7 and 8 are patentable at least by virtue of their dependency.

C. Claim 9 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (U.S. 6,029,226) in view of Harari et al. (U.S. 5,297,148).

Claim 9 depend from claim 1. Applicant submits that Harari fails to cure the deficiencies of Ellis, as discussed above, with respect to claim 1. Accordingly, Applicant submits that claim 9 is patentable at least by virtue of its dependency.

D. Claims 10-12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (U.S. 6,029,226) in view of Carman et al. (U.S. 6,272,632).

Regarding claim 10, Applicant notes that this claim recites that if a write end address of one of the received commands is consecutive with a write start address of a following command, performing the data writing to the memory card by the consecutive commands in a single process, wherein the process is activated when a write-start address *A* and a sector number *s* from the one command is decoded, and involves the data writing being started from the write-start address *A*, and wherein the following command is analyzed until the written sector number reaches *s*.

For at least similar reasons as discussed above with respect to claim 1, Applicant respectfully submits that Ellis does not disclose, suggest or otherwise render obvious the above-noted features recited in claim 10. Further, Applicant submits that Carman does not cure these deficiencies of Ellis.

In view of the foregoing, Applicant submits that claim 10 is patentable over the cited prior art, an indication of which is kindly requested. Claims 11 and 12 depend from claim 10 and are therefore considered patentable at least by virtue of their dependency.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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